POSTSECONDARY

# **VALUE COMMISSION**

# ENSURING A MORE EQUITABLE FUTURE: EXPLORING THE RELATIONSHIP BETWEEN WELLBEING AND POSTSECONDARY VALUE

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May 2021

# ENSURING A MORE EQUITABLE FUTURE: EXPLORING THE RELATIONSHIP BETWEEN WELLBEING AND POSTSECONDARY VALUE

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Suggested citation: Marken, S. (2021). Ensuring a more equitable future: Exploring the relationship between wellbeing and postsecondary value. Postsecondary Value Commission.

# INTRODUCTION

For decades, Gallup research has confirmed that, for most Americans, a college degree represents a clear pathway to a good job and a great life. Although extensive research exists about the short- and long-term outcomes of a college degree, researchers, leaders, and education consumers still lack a common definition of the value of postsecondary education. Creating an equity-focused definition of postsecondary value would provide important focus for education leaders, encouraging each of them to offer programmatic experiences that equitably deliver on the elements identified in the definition for students from all backgrounds.

This paper informs the development of this definition by summarizing research on how U.S. adults perceive higher education and the value it provides them. The paper also explores a critical outcome of higher education—graduate wellbeing—and how this element combines with other economic measures such as income, to capture the complete value a postsecondary degree provides graduates. It is important to note that the research conducted for this paper uses data collected among those with a bachelor's degree or higher, and further research is needed among those who have no postsecondary experience, those who have completed some postsecondary education but not completed a degree, and those with other types of credentials and degrees.

# IMPORTANCE OF A POSTSECONDARY DEGREE

Important to defining the value of a postsecondary degree is understanding how U.S. adults perceive postsecondary education. In 2013, the majority (70%) of U.S. adults reported it was very important to have a certificate or degree beyond high school, and about a quarter (24%) believed it was somewhat important (Table 1). U.S. adults' perceptions of postsecondary education are traditionally tied to various personal goals, with most related to their career or financial outcomes.

This research revealed that the extent to which U.S. adults believed postsecondary training is important was, in part, related to their own education level. U.S. adults with higher levels of education were more likely to believe having postsecondary training is very important—77% of those with a college degree or certificate believed it is very important, compared with 66% of those with a high school degree or diploma only (Table 1). Those with some college but who did not complete their degree were the least likely to believe postsecondary training is very important (60%), but were still positive about its overall value (Table 1).

Table 1. How important is having a certificate or degree beyond high school?

	% All U.S. adults	% With high school diploma or less	% With some college	% With college degree or certificate
Very important	70	66	60	77
Somewhat important	24	26	33	20
Not very important	4	5	3	3
Not at all important	1	1	3	<0.5

Source: What America Needs to Know About Higher Education. The 2013 Lumina Study of the American Public's Opinion on Higher Education and U.S. Business Leaders Poll on Higher Education. (2014) Retrieved from Gallup website: https://www.gallup.com/services/176759/america-needs-know-higher-education-redesign.aspx

Perceptions of college importance also varied by demographic factors including race/ethnicity, gender, and age. Latinx and Black U.S. adults were more likely than their White peers to believe a college education is very important—66% and 65% compared with 44%, respectively (Table 2). Women were also more likely than men to believe having a college education is very important (57% versus 45%; Table 2). Youth (aged 18-29) were among the least likely age group to believe a college education is very important—41%, compared with more than half who were aged 30 or over (Table 2).

Table 2. How important is a college education today...very important, fairly important, or not too important?

	Male	Female	Latinx	Black	White	18-29	30-49	50-64	65+
% Very important	45%	57%	66%	65%	44%	41%	51%	55%	55%

Source: Marken, S. (December 2019) Half in U.S. now consider college education very important. Gallup Blog. Retrieved from Gallup website: https://www.gallup.com/education/272228/half-consider-college-education-important.aspx

The difference in perception of importance by age is a new phenomenon. In 2013, when Gallup last asked U.S. adults about the importance of a college education, approximately equal percentages of U.S. adults from different age groups rated it as very important. Growing skepticism of its importance among younger U.S. adults is a new pattern that will prove important to monitor. Similar skepticism exists about how well higher education prepares students for life after college. In a recent Pew Research study, just 16% of U.S. adults reported that 4-year degrees prepare students "very well" for a well-paying job in today's economy.

Despite overall optimism about the value of a college degree across demographics, U.S. adults are becoming slightly less positive about higher education's importance.<sup>2</sup> For example, in a 2019 Gallup survey of U.S. adults, about half said having a college education is very important, representing a decline of 17 percentage points from 2013 (Table 3). People raise accessibility and affordability as two major criticisms of obtaining a college education, with an increasing percentage of the American public reporting qualitatively that the system is inaccessible and unaffordable to most Americans.

Table 3. How important is a college education today...very important, fairly important, or not too important?

	% Very	% With high school diploma or less	% With some college	% With college degree or certificate
2019 Jun 19-30	51	36	13	<1
2013 Dec 5-8	70	23	6	<1

Source: Source: Marken, S. (December 2019) Half in U.S. now consider college education very important. Gallup Blog. Retrieved from Gallup website: https://www.gallup.com/education/272228/half-consider-college-education-important.aspx

When evaluating the value of postsecondary education, in 2013, U.S. adults had jobs and quality of life on their minds. Nearly three quarters (73%) of U.S. adults strongly agreed or agreed that a certificate, certification, or degree beyond high school is essential for getting a good job (Table 4).

For an additional discussion on the relationship between skills gaps and the value of postsecondary education, see: Collins, M. (2021). Ensuring a More Equitable Future: Addressing the Skills Gaps through Multiple, Nuanced Solutions. Postsecondary Value Commission. Retrieved from: <a href="https://www.postsecondaryvalue.org/wp-content/uploads/2021/04/PVC-Collins-FINAL.pdf">https://www.postsecondaryvalue.org/wp-content/uploads/2021/04/PVC-Collins-FINAL.pdf</a>

Similarly, 74% of U.S. adults strongly agreed or agreed that a postsecondary degree or credential leads to a better quality of life (Table 4). Agreement with both statements is highly related.

These sentiments reflect the expectations of currently enrolled students, too. Qualitatively, many current students report expecting a "great job" from their higher education experience, describing their idea of a great job in terms of the mission/purpose, use of their skills and talents, and compensation."

Table 4. On a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with each of the following statements about higher education and the workforce.

	1 Strongly disagree	2	3	4	5 Strongly agree
Certificate/certification/degree beyond high school essential for getting a good job	5%	6%	16%	29%	44%
Postsecondary degree or credential leads to a better quality of life	3%	6%	17%	34%	40%

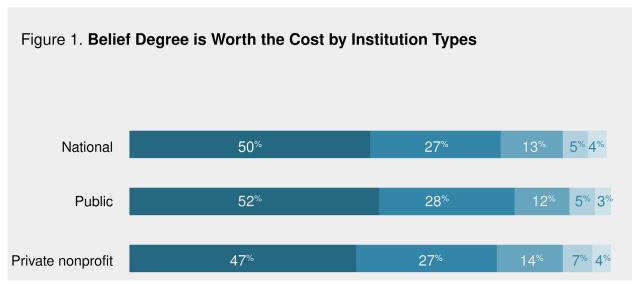
Source: What America Needs to Know About Higher Education. The 2013 Lumina Study of the American Public's Opinion on Higher Education and U.S. Business Leaders Poll on Higher Education. (2014) Retrieved from Gallup website: https://www.gallup.com/services/176759/america-needs-know-higher-education-redesign.aspx

ii These data have not been publicly released.

# ASSESSING VALUE: IS COLLEGE WORTH THE COST?

It is also important to understand perceived value from the perspective of the college graduate. In 2014, Gallup sought to address the commonly asked question—is college worth it—by directly asking graduates the extent to which they would agree or disagree that their degree was worth the cost. (See Appendix for survey questions.) Gallup found that about three-quarters (77%) of recent graduates agreed that their degree was worth the cost, with "strong" agreement from half of graduates. While results were similar regardless of graduate race/ethnicity or gender, sentiments varied by institutional sector. Only 26% of private-for-profit graduates strongly agreed that their degree was worth the cost, compared with about half of graduates from public or private nonprofit colleges (Figure 1).

Figure 1: Belief Degree is Worth the Cost by Institution Type



Source: Crabtree, S & Seymour, S. (September 2015) Recent grads less likely to agree college was worth the cost. Retrieved from Gallup website: https://news.gallup.com/poll/185819/recent-grads-less-likely-agree-college-worth-cost.aspx

Belief that one's degree was worth the cost was also relatively consistent across major fields of study, with the exception of engineering and science majors who were slightly more likely than other majors, including arts and humanities, business, and social sciences, to believe their degree was worth the cost (Table 5).

Table 5. Belief Degree is Worth the Cost by Major Field of Study

	MAJOR					
	Sciences	Social Sciences	Business	Arts & Humanities	Engineering	Others
1 - Strongly disagree	4.8%	4.1%	5.9%	6.3%	2.8%	9.9%
2	6.5%	4.3%	5.7%	6.1%	2.2%	6.2%
3	11.2%	13.7%	18.3%	13.7%	8.7%	13.2%
4	23.2%	27.5%	24.8%	26.2%	27.7%	28.1%
5 - Strongly agree	53.5%	50.0%	44.5%	46.4%	57.4%	41.3%

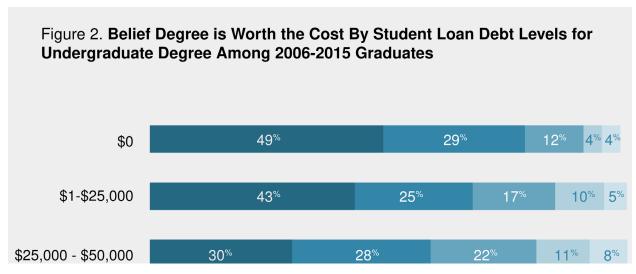
Differences by college major may be linked to variations in economic outcomes for students in different fields of study since Gallup has found that students' income after college is closely tied to whether graduates believe their degree was worth the cost (Table A12). While 62% of those who reported personal annual incomes of \$120,000-\$240,000 strongly agreed their degree was worth the cost, just 43% of those earning less than \$36,000 annually said the same.

Student debt also impacts individuals' attitudes toward college value. Graduates who borrowed more to fund their undergraduate degree were less likely to strongly agree their degree was worth the cost than those with less student loan debt. Nearly half (49%) of recent college graduates who did not borrow for college strongly agreed that their degree was worth the cost, compared with 18% of those who borrowed more than \$50,000 to complete their degree (Figure 2).

Although student loan debt levels were highly correlated with a belief that their degree was worth the cost, Gallup found that a high-quality college experience can blunt the impact of debt on perceived value, even for graduates with high student loan debt.

Although student loan debt levels were highly correlated with a belief that their degree was worth the cost, Gallup found that a high-quality college experience can blunt the impact of debt on perceived value, even for graduates with high student loan debt. For example, only 25% of those who borrowed more than \$25,000 in order to complete their undergraduate degree strongly agreed that their degree was worth the cost. However, among students with the same debt level (more than \$25,000) who also reported that they had a mentor, their professors cared about them, and they had at least one professor who made them excited about learning, twice as many (48%) strongly agreed their degree was worth the cost.<sup>3</sup> Clearly, institutional actions impact the perceived value students receive.

Figure 2. Belief Degree is Worth the Cost by Student Loan Debt Levels for Undergraduate Degree Among 2006-2015 Graduates



Source: Great Jobs, Great Lives. The Relationship Between Student Debt, Experiences and Perceptions of College Worth. Gallup-Purdue Index 2015 Report. (2015) Retrieved from Gallup website: https://www.gallup.com/services/185924/gallup-purdue-index-2015-report.aspx

# ASSESSING VALUE: METRICS FOR MEASURING WELLBEING

Belief that one's degree is worth the cost is often related to its anticipated outcome, which is often a better life. Most individuals who pursue postsecondary education report doing so to improve the quality of their own life and their family's future. Income is an important element of a good or better life, but other non-economic factors, including wellbeing and the quality of one's career, are also important in evaluating the impact of a postsecondary degree. This section discusses several tools that measure wellbeing, which, alongside other metrics of economic success such as earnings and wealth, can be useful in measuring the value of postsecondary education.

Social science researchers use multiple methods to assess wellbeing and job quality. Different measures of wellbeing provide different perspectives, so Gallup uses the following multiple metrics (See Appendix for survey questions): current and future life evaluation, wellbeing in five interrelated elements, and employee engagement.

### Life Evaluation via the Cantril Scale

The Cantril Scale asks respondents to evaluate their current and future quality of life (see Appendix for question details). One distinct value of this tool is that it acts as a simple, summary measure of one's overall wellbeing. Wellbeing, as measured by the Cantril scale, is also highly correlated with assessments of degree value among college graduates. For these reasons, the Cantril life evaluation metric can be used as a summative wellbeing measure to assess postsecondary outcomes.

While the Cantril "present" and "future" items can be evaluated separately, Gallup combines these two ratings in order to improve the scale's reliability. The patterns in the data—based on hundreds of thousands of respondents in more than 150 countries—suggest the scale can be meaningfully grouped into at least three distinct categories, described below, to easily communicate the results and report on changes over time. The scales can then be combined to form a "Life Evaluation Index."

iii The conceptual labels for the categories were chosen based on the empirical relationships established during various iterations of research exploring how responses on the ladder-present and ladder-future scales interact with other important measures, such as daily affect, daily experiences, and health problems.

**Thriving:** wellbeing that is strong, consistent, and progressing. These respondents have positive views of their present life situation (7+ out of 10) and have positive views of the next five years (8+). They report significantly fewer health problems, fewer sick days, less worry, stress, sadness, anger, and more happiness, enjoyment, interest, and respect, than those who are classified as struggling or suffering in their wellbeing.

**Struggling:** wellbeing that is moderate or inconsistent. These respondents have moderate views of their present life situation OR moderate OR negative views of their future. They are either struggling in the present or expect to struggle in the future. They report more daily stress and worry about money than the "thriving" respondents, and having more than double the amount of sick days. They are more likely to smoke and are less likely to eat healthily.

**Suffering:** wellbeing that is at high risk. These respondents have poor ratings of their current life situation (4 and below) AND negative views of the next five years (4 and below). They are more likely to report lacking the basics of food and shelter and are more likely to have physical pain, a lot of stress, worry, sadness, and anger. They have less access to health insurance and care, and more than double the disease burden, in comparison to "thriving" respondents.

### Five wellbeing elements

Gallup also uses a proprietary metric to assess wellbeing among college graduates across five interrelated wellbeing elements—purpose, social, community, physical, and financial wellbeing. (See Appendix for question wording.) Based upon Gallup's extensive analysis in the area of wellbeing, these five broad categories are essential to most people, and respondents with higher wellbeing in all five areas reported higher present life and future life evaluations (as measured by the Cantril scale), better daily experiences, fewer unhealthy days and health problems, and a higher likelihood of giving.

- Purpose wellbeing: Liking what you do each day and being motivated to achieve your goals
- Social wellbeing: Having strong and supportive relationships and love in your life
- **Financial wellbeing:** Effectively managing your economic life to reduce stress and increase security
- **Community wellbeing:** The sense of engagement you have with the areas where you live, liking where you live and feeling safe and having pride in your community
- Physical wellbeing: Having good health and enough energy to get things done on a daily basis

This wellbeing index requires a slightly longer battery of survey items than the Cantril life evaluation metric (12 compared with just 2), making it less efficient – yet more nuanced. In the context of

The thriving cutoff points between positive views of their present life situation and positive views of the next five years are different because they are based on different distributions. The latter has a more positive distribution – people are usually more positive about their future than they are about the current situation – which is why there is a higher bar and cutoff. For those who are struggling, their cutoff points for their view of their present life situation and their view of the next five years are 5-6 and 5-7, respectively. These numbers are based on the 11-point Cantril scale, which ranges from 0-10.

v Daily experiences is based on 10 daily items. These are scored 0-10, where 1 is scored for each positive experience or absence of a negative one and 0 is scored for each negative experience or absence of a positive one, which, when combined, comprise the positive experience index and the negative experience index to form a composite of experiences "yesterday."

vi Giving combines charitable giving, volunteerism, and helping someone an individual does not know. For additional information, including the question wording, please see: https://www.gallup.com/services/176330/wellbeing-meta-analysis.aspx

measuring postsecondary value, this wellbeing index can allow institutions to concentrate on and diagnose successes and challenges in specific areas, rather than providing a summative measure like the Cantril life evaluation metric does. This detailed evaluation could be particularly helpful in evaluating a specific programmatic intervention. For example, a specific institution may want to evaluate the physical wellbeing of those who participate in a new program implemented by the institution to improve student health, and these wellbeing indicators could serve that purpose.

## Employee engagement

Employee engagement is critical to understanding an individual's quality of life. The data reveal that when employee engagement is low, employees are unable to achieve high personal wellbeing. It is particularly important to quantify employee engagement among the college graduate population given that nearly all incoming freshmen reported a job-related reason for enrolling in college. Employee engagement also provides an important balance to traditional employment metrics such as the unemployment rate, which is an insufficient measure to understanding job quality.

Gallup began studying the employee experience more than 30 years ago and uses its proprietary index, Gallup Q12, to categorize employees into three groups: engaged, not engaged, and actively disengaged.<sup>4</sup> Engaged employees tend to demonstrate three key characteristics that are not as evident in those who are less engaged—dedication, ownership, and commitment (see Appendix for more detail). Gallup research finds 32% of U.S. workers nationally are engaged—psychologically committed—to their organizations, leaving the remaining 68% falling short of their potential to derive real purpose from their work. The relationship between employee engagement and postsecondary education is discussed in greater detail in the following sections.

# ASSESSING VALUE: EVIDENCE FROM WELLBEING METRICS

## Variations in college graduate wellbeing

Critical to understanding the role of wellbeing in the evaluation of a postsecondary degree is understanding how wellbeing differs among college graduates based upon their personal demographic factors and college of choice. Graduate wellbeing varies by factors such as institutional sector, undergraduate student debt, race/ethnicity and post-college earnings. For-profit graduates are far less likely to be thriving in their wellbeing than their peers from other institutions (Table A13). These lower levels of wellbeing could be tied to higher borrowing levels at for-profit institutions, as wellbeing tends to decline among those with higher levels of student debt (Table 6).

Table 6. Percentage of U.S. college graduates thriving in five elements of wellbeing by amount of undergraduate student loan debt borrowed<sup>5</sup>

	No student loan debt	\$25,000 and below	\$25,001- 50,000	Over \$50,000
Purpose wellbeing	49%	46%	40%	40%
Social wellbeing	47%	45%	42%	45%
Financial wellbeing	40%	31%	26%	25%
Community wellbeing	43%	42%	35%	38%
Physical wellbeing	34%	30%	26%	24%

Source: Dugan, A., & Marken, S. (August 2014) Student Debt Linked to Worse Health and Less Wealth. Gallup Blog. Retrieved from Gallup website: https://news.gallup.com/poll/174317/student-debt-linked-worse-health-less-wealth.aspx

Non-White graduates also typically have lower levels of wellbeing than their White peers, although research documents two important exceptions. Black graduates from Historically Black Colleges and Universities (HBCUs) and Latinx graduates from Hispanic Serving Institutions (HSIs) both consistently demonstrate higher wellbeing levels than their Black and Latinx peers who graduated from non-HBCUs and non-HSIs, respectively. Fig. 12.

### Relationship between income and wellbeing

The Postsecondary Value Commission's primary measurements of value are centered on post-college earnings outcomes. To understand the importance of wellbeing as an additional metric to assess postsecondary value, Gallup uses data from the Gallup Alumni Survey to explore the relationship between income and life evaluation, the five distinct wellbeing elements, and employee engagement.

This research finds that income is correlated with wellbeing. Across all income categories, there is a strong and consistent increase in the percentage of U.S. adults who are thriving in their life evaluation (Table 7). It is important to note that when conducting complex modeling, and in holding all other variables consistent, there is no significant increase in wellbeing levels after a household reaches \$75,000 annually. Lower income graduates are less likely than those with higher incomes to be thriving in their life evaluation (Table 7), thriving in each of the

Black graduates from
Historically Black
Colleges and Universities
(HBCUs) and Latinx
graduates from Hispanic
Serving Institutions
(HSIs) both consistently
demonstrate higher
wellbeing levels than
their Black and Latinx
peers who graduated
from non-HBCUs and
non-HSIs, respectively.

vii Non-White includes graduates who identify as Black, Latinx, Indigenous, Native Hawaiian/Pacific Islander, and multi-race.

viii For additional information on the support and experiential learning that Black graduates receive from HBCUs and how this impacts their engagement at work, their thriving in the five elements of wellbeing, and their attachment to their alma mater, see: Gallup-USA Funds. (2015). Gallup-USA Funds Minority College Graduates Report. Retrieved from: <a href="https://www.gallup.com/services/186359/gallup-usa-funds-minority-college-graduates-report-pdf.aspx">https://www.gallup.com/services/186359/gallup-usa-funds-minority-college-graduates-report-pdf.aspx</a>.

For additional information on the support and experiential learning that Latinx graduates receive from HSIs and how this impacts their engagement at work, their thriving in the five elements of wellbeing, and their attachment to their alma mater, see: Gallup & Excelencia (2018). Excelencia in Education: Examining Life Outcomes Among Graduates of Hispanic-Serving Institutions. Retrieved from: <a href="https://www.edexcelencia.org/research/publications/examining-life-outcomes-among-graduates-hispanic-serving-institutions">https://www.edexcelencia.org/research/publications/examining-life-outcomes-among-graduates-hispanic-serving-institutions</a>.

five elements of wellbeing, especially purpose and financial wellbeing (Table 8), and engaged in their work (Table 9). These trends hold across different race/ethnicities, genders, and post-baccalaureate credential attainment (Tables A14, A15, and A16).

Table 7. Life evaluation by income level among college graduates with a 4-year degree or higher (n=60,417)

	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +	Total
Thriving	59%	67%	76%	85%	71%
Struggling	38%	32%	23%	15%	28%
Suffering	3%	1%	1%	0%	1%

Table 8. Wellbeing elements by income level

	Purpose wellbeing by income (n=62,219)						
	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +	Total		
Thriving	43%	50%	55%	64%	52%		
Struggling	43%	40%	38%	31%	39%		
Suffering	13%	9%	7%	4%	9%		

	Social wellbeing by income (n=61,559)						
	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +	Total		
Thriving	46%	48%	51%	56%	50%		
Struggling	40%	41%	41%	37%	40%		
Suffering	15%	11%	8%	7%	10%		

	Financial wellbeing by income (n=61,958)						
	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +	Total		
Thriving	30%	37%	49%	61%	43%		
Struggling	37%	40%	38%	32%	37%		
Suffering	33%	23%	13%	7%	20%		

	Community wellbeing by income (n=61,300)							
	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +	Total			
Thriving	40%	45%	47%	52%	45%			
Struggling	40%	40%	40%	37%	39%			
Suffering	18%	13%	12%	9%	13%			

 Table 8. Wellbeing elements by income level (continued)

	Physical wellbeing by income (n=62,212)										
	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +	Total						
Thriving	28%	32%	36%	42%	34%						
Struggling	56%	58%	56%	51%	56%						
Suffering	15%	10%	8%	6%	10%						

Source: Author's calculations for the Postsecondary Value Commission using data from Gallup Alumni Survey 2019. Note: Gallup Alumni Survey respondents employed for an employer and represented in all engagement data are employed in a series of industries and roles within these industries.

Table 9. Employee engagement by income level (n=36,655)

	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +	Total
Engaged	36%	38%	40%	46%	40%
Not engaged	49%	49%	49%	46%	49%
Actively disengaged	15%	13%	11%	8%	12%

Source: Author's calculations for the Postsecondary Value Commission using data from Gallup Alumni Survey 2019. Note: Gallup Alumni Survey respondents employed for an employer and represented in all engagement data are employed in a series of industries and roles within these industries.

# Income and wellbeing as predictors of how graduates perceive postsecondary value

The Gallup Alumni Survey assesses graduates' perceived value of their degree by measuring the extent to which they believe their degree is "worth the cost" and whether they would recommend their alma mater to a friend or family member, as measured by the net promoter score (NPS). To evaluate whether wellbeing survey measures are useful supplements to personal income measures in evaluating postsecondary value, Gallup used hierarchical regression analyses to explore the relative impact of economic (income) and non-economic (life evaluation, wellbeing and employee engagement) variables on these two measures of perceived postsecondary value.\*

This research finds that income and various wellbeing measures effectively predict whether graduates say their degree was "worth the cost." However, wellbeing measures are more powerful than income in predicting which graduates would recommend their institution to a friend or family member. This indicates that wellbeing measures are meaningful supplements to income measures in assessing postsecondary value.

For the purposes of this analysis, Gallup compared respondents who strongly agree their degree is worth the cost to all other respondents. Among the eight variables explored, income, employee engagement, and purpose and financial wellbeing have the greatest impact on the likelihood a graduate strongly agrees their degree was worth the cost (Table 10). It is worth noting that two

x Results are based on responses collected from 2014-2017 among <60,000 graduates who completed a bachelor's degree over approximately a 40-year period. All graduates surveyed have completed a 4-year degree or higher from a Title IV degree-granting institution. All questions pertained to these respondents' undergraduate experience.

of these variables are directly related to graduates' economic outcomes (income and financial wellbeing). Income acts as a strong predictor when evaluated individually, however once measures of wellbeing are added to the model, its relative importance declines (although it remains significant).

# Hierarchical Regression Analyses Steps to Explore the Relative Impact of Economic and Non-Economic Variables on Whether Graduates Say Their Degree Was "Worth the Cost"

**STEP 1:** First, Gallup adds personal income to the model and **finds graduates who are above the median income level are 1.7 times as likely to strongly agree** their degree is worth the cost.

**STEP 2:** Next, Gallup adds employee engagement and finds graduates who are employed for an employer and **engaged in their work are 1.9 times more likely** to believe their degree is worth the cost. In **adding engagement to the model, the relative impact of income remains stable**.

**STEP 3:** As a third step, Gallup adds life evaluation and finds that graduates **who are thriving are 1.8 times more likely** to believe their degree was worth the cost. In adding life evaluation to the model, the impact of income and engagement decreases slightly although both remain significant.

**STEP 4:** As a final step, Gallup adds each of the five individual wellbeing elements to the model. Among the five elements, thriving in purpose and financial wellbeing have the greatest impact on the likelihood graduates strongly agree their degree is worth the cost. **When adding the five wellbeing elements to the model, the impact of income declines but remains significant.** 

Table 10. Ranking in importance of variable on perception degree is "worth the cost"

Rank	Variable	Variable impact on belief degree is worth the cost
	Employee engagement	1.4
4	Purpose wellbeing	1.4
	Financial wellbeing	1.4
	Income	1.4
2	Social wellbeing	1.3
3	Life evaluation	1.2
<u> </u>	Community wellbeing	1.2
4	Physical wellbeing	1.1

# NET PROMOTER SCORE (NPS)

NPS is commonly used in market research to assess a consumer's loyalty and satisfaction with a product or brand. An increasing number of higher education institutions are using this measure in currently enrolled student and alumni surveys to assess how well they are meeting students' expectations and needs. NPS is calculated based on responses to this question: How likely is it that you would recommend [University] to family, friends, or colleagues? (See Appendix for question wording and classification of responses). For the purposes of this analysis, Gallup compared promoters, as measured by NPS, to all other respondents.

Among the eight variables explored, thriving in life evaluation had the greatest impact on the likelihood a graduate was a promoter (Table 11). When evaluated individually, income has a significant impact on the likelihood a graduate would recommend their university to a friend or family member; yet once wellbeing metrics are added to the model, the impact of income declines.

# Hierarchical Regression Analyses Steps to Explore the Relative Impact of Economic and Non-Economic Variables on Whether Graduates Are Likely to Promote their Alma Mater

**STEP 1:** First, Gallup assesses the importance of personal income alone on the likelihood to be a promoter and finds that college graduates with an **income above the median are 1.2 times more likely to be a promoter** of their university.

**STEP 2:** Next, Gallup adds employee engagement to the model and finds college graduates who are employed for an employer and **engaged in their work are 1.7 times more likely to be a promoter** of their alma mater. When adding employee engagement to the model, income remains relatively stable in its total impact on the likelihood a graduate is a promoter or not.

**STEP 3:** As a third step, Gallup adds life evaluation and finds that graduates who are **thriving in their life evaluation are 1.8 times more likely to be a promoter** of their university. When life evaluation is added to the model, the relative importance of income notably decreases and has no significant impact on the likelihood a respondent would be a promoter of their alma mater, and the impact of employee engagement decreases slightly from 1.7 times to 1.6 times.

**STEP 4:** As a final step, Gallup adds each of the five individual wellbeing elements to determine the overall impact of thriving in each of these elements on the likelihood one would be a promoter of their university. Gallup compared those who were thriving in each element to all other respondents. Among the five elements, **thriving in purpose wellbeing has the greatest impact on the likelihood a graduate will be a promoter** of their university. Individuals who are thriving in their purpose wellbeing derive energy from their daily activities and feel fulfilled.

Table 11. Ranking in importance of variable on NPS

Rank	Variable	Variable impact on likelihood to be a promoter				
1	Life evaluation	1.4 times				
2	Employee engagement	1.3 times				
2	Purpose wellbeing	1.3 times				
3	Social wellbeing	1.2 times				
3	Community wellbeing	1.2 times				
4	Physical wellbeing	1.1 times				
4	Financial wellbeing	1.1 times				
5	Income	1.0 times				

# College/university measurement of impact

There are a number of key experiences that increase students' odds of experiencing high wellbeing post-graduation, including experiential learning opportunities in which students engage while enrolled (e.g., having a high quality internship, participating in extracurricular activities, engaging in a long-term research project) and supportive experiences (e.g., having a mentor, having professors who care about them, and having professors who made them excited about learning). Graduates who reported they had all of these experiences are more likely to achieve high wellbeing and employee engagement upon graduation—both of which have an important impact on their belief that their degree is worth the cost and a likelihood to recommend their alma mater to others. In addition to these supportive experiences and experiential learning opportunities, researchers find that graduates' perception of value is also related to how relevant the content and skills/knowledge gained through curriculum is to future employment. Graduates who report their coursework while enrolled was highly relevant to their current job are also more likely to strongly agree their degree is worth the cost—suggesting that course relevancy is an important component of value (Figure A1).

The connection between these experiences and wellbeing are obvious. For example, students who had a mentor who encouraged them to pursue their goals and dreams often describe that mentor as pushing them towards a career they are highly engaged in and provides them purpose—critical elements of purpose wellbeing. These influential experiences have lasting effects for students long beyond graduation and allow students to thrive. Institutions that are focused on identifying, isolating, and measuring these experiences will provide far better value for their students.

# CONCLUSION

Gallup research confirms that most U.S. adults still value a college degree, but at a decreasing rate-requiring higher education institutions to continue to demonstrate and communicate their value to the general population. This value proposition has become even more critical as campuses have been upended by the COVID-19 crisis raising questions nationally about the value of a college experience.xi Although the rapid change from in-person to online instruction in the spring was difficult and led to a turbulent education experience for many, students interviewed in fall 2020 reported a high-quality experience. About three quarters (76%) of currently enrolled students rated their experience as "excellent" or "very good." Still, those returning students who originally opted for a mostly in-person experience and have been forced to transition to online instruction report quality declines that must be addressed to ensure students remain enrolled and

Although income is important in determining the value of a college degree, it is does not alone reflect why students pursue postsecondary education. When asked, most students report doing so to achieve a better life. And a better life is not adequately measured by income alone.

graduate. While many institutions have developed important institutional capacity for delivering online instruction, others must quickly focus on creating an engaging learning experience as students make important decisions about the value of a college degree beyond the 2020-2021 academic year.

Value is a complicated construct and requires nuanced metrics. Although income is important in determining the value of a college degree, it is does not alone reflect why students pursue postsecondary education. When asked, most students report doing so to achieve a better life.

Gallup research
suggests that both
life evaluation and
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metrics and could prove
useful for measuring
postsecondary value in
different ways.

And a better life is not adequately measured by income alone. Gallup's quantitative research supports this sentiment, suggesting that wellbeing measures provide an important complement to income in measuring the value of a postsecondary experience or degree. Indeed, wellbeing and income are equally strong in predicting the likelihood a graduate believes their degree is worth the cost. Wellbeing measures are also stronger than income in predicting the likelihood a graduate would recommend their alma mater to a friend or family member—another important assessment of perceived value.

There are many ways to assess wellbeing—life evaluation and the Gallup wellbeing index being just two methods. Gallup research suggests that both life evaluation and the wellbeing

index complement earnings metrics and could prove useful for measuring postsecondary value in different ways. For instance, the life evaluation metric can provide a simple, summary assessment

In the fall of 2020, Gallup and Lumina Foundation conducted a study of nearly 4,000 currently enrolled students pursuing their bachelor's degree to understand the extent to which the COVID-19 pandemic impacted the student experience. For additional information, see: <a href="https://www.gallup.com/education/327485/state-of-the-student-experience-fall-2020.aspx">https://www.gallup.com/education/327485/state-of-the-student-experience-fall-2020.aspx</a>.

of graduates' wellbeing, while the more detailed Gallup wellbeing index can inform institutions as they work to improve graduates' wellbeing in specific ways. The ideal metric for assessing student wellbeing is dependent upon the ultimate use-case, and future experiments will be instrumental in determining how to incorporate wellbeing. In the meantime, research makes clear that wellbeing must be included in some form to accurately reflect the holistic promise of a college degree.

Importantly, higher education institutions must assess their value with this guiding principle in mind—that students attend postsecondary education with the very aspirational goal of achieving a better job and a better life. Having these goals in mind continues to be critical to any attempt to assess value for students.

# **APPENDIX**

## Survey Items

### Degree is worth the cost

On a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please indicate your level of agreement with the following statement.

My education from [University Name] was worth the cost.

5-Strongly agree

4

3

2

1-Strongly disagree

### Gallup Employee Engagement Index

All items are asked on a 1-5 scale unless otherwise indicated.

- 1. How satisfied are you with your organization as a place to work?
- 2. I know what is expected of me at work.
- 3. I have the materials and equipment I need to do my work right.
- 4. At work, I have the opportunity to do what I do best every day.
- 5. In the last seven days, I have received recognition or praise for doing good work.
- 6. My supervisor, or someone at work, seems to care about me as a person.
- 7. There is someone at work who encourages my development.
- 8. At work, my opinions seem to count.
- 9. The mission or purpose of my organization makes me feel my job is important.
- 10. My colleagues are committed to doing quality work.
- 11. I have a best friend at work.
- 12. In the last six months, someone at work has talked to me about my progress.
- 13. This last year, I have had opportunities at work to learn and grow.

Engaged employees demonstrate dedication, ownership and commitment to their organization at higher rates than their peers who are not engaged or actively disengaged.

**Dedication:** Engaged employees are more loyal to the organization. These employees work harder and "smarter" than others and are willing to take on tasks outside of their core job description. Engaged employees are focused on excellence and continuous improvement — always looking to enhance their own performance.

**Ownership:** There is a heightened sense of accountability among engaged employees that is driven from within. Engaged employees are more willing to communicate and collaborate with others. Engaged employees are also more willing to work through challenges. Engaged employees won't wait for a problem to arise to offer their suggestions or comments. Even in organizations where the channels of communication aren't clear, engaged employees will find a way to ensure that their voice is heard.

**Commitment:** Dedication and ownership tend to be tied to one's role, whereas commitment is about one's connection to the organization. Engaged employees have a greater understanding of and alignment with their organization's direction. Engaged employees are also able to see a future for themselves in the organization. That inner drive and vision helps engaged employees look past some of the "distractions" (e.g., pay benefits, staffing, bureaucracy) that may negatively impact their less-engaged counterparts.

### **Cantril Scale Measuring Life Evaluation**

- 1. Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time? (0-10 scale)
- 2. On which step do you think you will stand about five years from now? (0-10 scale)

### Gallup Wellbeing Index

All items are asked on a 1-5 scale unless otherwise indicated.

- Please imagine a ladder with steps numbered from zero at the bottom to 10 at the top.
   The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time? (0-10 scale)
- 2. On which step do you think you will stand about five years from now? (0-10 scale)
- 3. I like what I do every day.
- 4. I learn or do something interesting every day.
- 5. Someone in my life always encourages me to be healthy.
- 6. My friends and family give me positive energy every day.
- 7. I have enough money to do everything I want to do.
- 8. In the last seven days, I have not worried about money.
- 9. In the last seven days, I have felt active and productive every day.
- 10. My physical health is near-perfect.
- 11. The city or area where I live is a perfect place for me.
- 12. In the last 12 months, I have received recognition for helping to improve the city or area where I live.

## **NPS**

How likely is it that you would recommend [University] to family, friends, or colleagues?

10-Extremely likely

9

8

7

6

5

4

3

2

0-Not at all likely

Respondents are classified as follows based on their response to this question as promoters, passives, and detractors.



# **Detailed Tables**

Table A12. Belief degree is worth the cost by income

	Income									
	< \$36,000	\$36,000-59,999	\$60,000-119,999	\$120,000-240,000 +						
Do not strongly agree	57.2%	53.0%	46.4%	37.9%						
Strongly agree	42.8%	47.0%	53.6%	62.1%						

Source: Author's calculations for the Postsecondary Value Commission using data from Gallup Alumni Survey 2019.

Table A13. Wellbeing by institution type

	Type of Institution								
		Public	Private Not- For-Profit	Private For- Profit	Total				
	Suffering	8.6%	8.4%	18.9%	8.8%				
Purpose wellbeing	Struggling	40.0%	38.4%	42.6%	39.5%				
	Thriving	51.4%	53.2%	38.5%	51.7%				
	Suffering	10.8%	9.9%	18.1%	10.6%				
Social wellbeing	Struggling	40.5%	40.6%	43.0%	40.6%				
	Thriving	48.7%	49.5%	39.0%	48.8%				
	Suffering	20.3%	18.9%	36.1%	20.2%				
Financial wellbeing	Struggling	37.5%	37.7%	38.6%	37.6%				
	Thriving	42.2%	43.4%	25.4%	42.2%				
	Suffering	13.6%	11.9%	23.9%	13.3%				
Community wellbeing	Struggling	40.8%	40.5%	43.5%	40.7%				
	Thriving	45.6%	47.5%	32.5%	46.0%				
	Suffering	9.4%	9.0%	17.7%	9.5%				
Physical wellbeing	Struggling	55.7%	56.0%	59.6%	55.9%				
	Thriving	34.9%	34.9%	22.8%	34.6%				

Table A14. Wellbeing by race/ethnicity and income among college graduates

		Race								Race	
		W	hite		Black, Latinx,	, Indigenous, Na and Mเ	acific Islander,		Black, Latinx, Indigenous,		
			Inc	ome			Inc	ome	·	White	Native Hawaijan/
		< \$36,000	\$36,000- 59,999	\$60,000- 119,999	\$120,000- 240,000 +	< \$36,000	\$36,000- 59,999	\$60,000- 119,999	\$120,000- 240,000 +		Pacific Islander, and Multi-race
	Suffering	12.8%	8.5%	6.2%	3.8%	16.1%	11.2%	8.4%	5.1%	8.1%	10.6%
Purpose wellbeing	Struggling	42.4%	39.8%	37.3%	30.8%	46.8%	43.1%	41.8%	32.8%	37.9%	41.8%
	Thriving	44.7%	51.7%	56.5%	65.3%	37.1%	45.7%	49.7%	62.0%	54.0%	47.6%
	Suffering	14.4%	10.5%	8.6%	6.4%	14.5%	10.6%	7.6%	7.4%	10.2%	10.1%
Social wellbeing	Struggling	39.8%	41.2%	41.0%	38.1%	40.6%	41.3%	41.5%	33.6%	39.8%	39.5%
	Thriving	45.8%	48.4%	50.4%	55.6%	44.9%	48.1%	51.0%	59.0%	50.0%	50.4%
	Suffering	31.2%	20.8%	12.3%	6.6%	40.0%	29.2%	17.0%	7.0%	18.1%	24.8%
Financial wellbeing	Struggling	36.7%	40.1%	36.3%	30.5%	40.5%	41.5%	42.3%	37.4%	36.1%	40.4%
	Thriving	32.1%	39.1%	51.4%	62.9%	19.6%	29.3%	40.7%	55.6%	45.8%	34.8%
	Suffering	17.3%	12.4%	11.3%	8.8%	22.6%	17.0%	14.7%	10.3%	12.6%	16.7%
Community wellbeing	Struggling	39.8%	40.5%	39.5%	37.7%	44.6%	42.1%	42.9%	38.7%	39.4%	42.4%
	Thriving	42.8%	47.1%	49.2%	53.5%	32.8%	40.9%	42.4%	51.0%	48.0%	40.9%
	Suffering	14.8%	9.9%	7.8%	5.9%	17.7%	10.6%	9.2%	7.0%	9.7%	11.5%
Physical wellbeing	Struggling	56.3%	57.1%	55.1%	51.3%	57.6%	61.1%	59.3%	53.3%	55.0%	58.3%
	Thriving	28.9%	32.9%	37.1%	42.8%	24.6%	28.3%	31.4%	39.6%	35.2%	30.2%
Life evaluation	Suffering	61.0%	67.7%	76.8%	85.3%	50.4%	64.5%	73.2%	82.3%	72.0%	66.6%
	Struggling	36.0%	30.9%	22.6%	14.2%	46.9%	34.2%	26.3%	17.4%	26.6%	32.0%
	Thriving	3.1%	1.4%	0.6%	0.5%	2.7%	1.3%	0.5%	0.3%	1.4%	1.3%

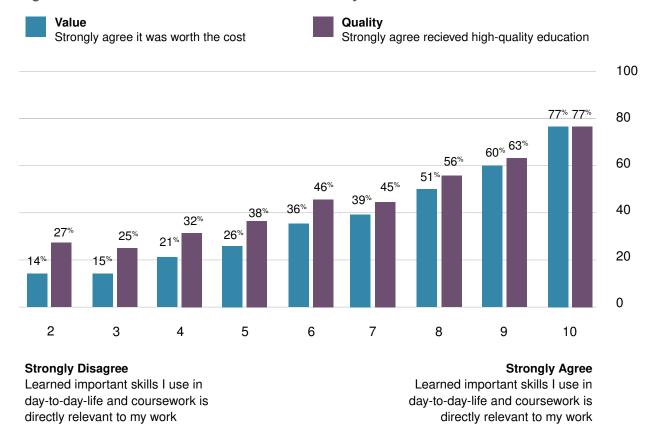
Table A15. Wellbeing by gender and income among college graduates

		Gender							Gender		
	Maie						F				
		Income				lr.	Male	Female			
		< \$36,000	\$36,000- 59,999	\$60,000- 119,999	\$120,000- 240,000 +	< \$36,000	\$36,000- 59,999	\$60,000- 119,999	\$120,000- 240,000 +		
	Suffering	18.4%	10.5%	7.2%	4.2%	11.5%	7.7%	6.3%	3.6%	9.1%	8.2%
Purpose wellbeing	Struggling	45.0%	41.8%	39.1%	32.1%	42.4%	39.4%	36.7%	29.4%	38.6%	38.6%
	Thriving	36.6%	47.7%	53.8%	63.7%	46.2%	52.8%	57.0%	67.0%	52.4%	53.3%
	Suffering	18.3%	11.4%	8.6%	6.9%	12.9%	9.7%	8.0%	6.0%	10.5%	10.0%
Social wellbeing	Struggling	43.2%	42.2%	42.1%	37.6%	38.5%	40.7%	40.0%	36.1%	40.7%	38.9%
	Thriving	38.5%	46.5%	49.3%	55.5%	48.6%	49.6%	52.0%	57.9%	48.8%	51.1%
	Suffering	38.9%	22.7%	12.7%	6.5%	30.3%	22.2%	14.1%	7.8%	17.7%	21.0%
Financial wellbeing	Struggling	37.4%	40.2%	37.7%	32.1%	37.4%	40.7%	37.5%	30.7%	36.6%	37.4%
	Thriving	23.7%	37.0%	49.5%	61.4%	32.3%	37.1%	48.4%	61.5%	45.7%	41.6%
	Suffering	21.8%	14.1%	12.4%	8.8%	17.1%	12.9%	11.6%	9.9%	13.3%	13.5%
Community wellbeing	Struggling	41.1%	41.1%	40.6%	38.2%	40.5%	40.6%	39.6%	37.3%	40.1%	39.8%
	Thriving	37.1%	44.8%	47.0%	53.0%	42.5%	46.5%	48.8%	52.8%	46.5%	46.6%
	Suffering	18.4%	10.5%	8.4%	6.3%	14.1%	9.7%	7.7%	5.8%	9.9%	10.3%
Physical wellbeing	Struggling	58.6%	59.6%	57.1%	53.3%	55.4%	56.7%	54.6%	47.6%	56.8%	54.5%
	Thriving	23.0%	29.9%	34.5%	40.4%	30.5%	33.6%	37.7%	46.7%	33.3%	35.2%
	Suffering	46.6%	63.6%	75.0%	85.0%	64.2%	69.7%	77.6%	83.5%	70.3%	71.5%
Life evaluation	Struggling	48.3%	34.7%	24.1%	14.6%	33.6%	29.2%	22.1%	15.9%	28.0%	27.3%
	Thriving	5.1%	1.7%	0.8%	0.4%	2.2%	1.1%	0.3%	0.5%	1.6%	1.2%

Table A16. Wellbeing by postgraduate degree and income

		Gender											
			Master'	s Degree			Doctora	te Degree		Other Graduate or Professional Degree			
		Income				Income				Income			
		< \$36,000	\$36,000- 59,999	\$60,000- 119,999	\$120,000- 240,000 +	< \$36,000	\$36,000- 59,999	\$60,000- 119,999	\$120,000- 240,000 +	< \$36,000	\$36,000- 59,999	\$60,000- 119,999	\$120,000- 240,000 +
	Suffering	11.4%	5.6%	4.6%	3.5%	12.9%	4.9%	5.0%	2.8%	6.6%	4.0%	3.9%	1.9%
Purpose wellbeing	Struggling	36.6%	34.4%	32.7%	29.2%	37.5%	27.3%	27.6%	22.0%	34.1%	32.3%	25.5%	19.3%
	Thriving	52.0%	60.0%	62.6%	67.3%	49.6%	67.8%	67.4%	75.3%	59.2%	63.7%	70.5%	78.8%
	Suffering	12.8%	8.5%	6.9%	6.7%	15.4%	11.1%	5.9%	5.5%	9.0%	8.9%	4.9%	5.6%
Social wellbeing	Struggling	36.6%	38.5%	37.8%	35.1%	39.9%	34.5%	36.9%	31.9%	37.2%	36.1%	37.6%	31.0%
	Thriving	50.6%	53.0%	55.3%	58.3%	44.7%	54.4%	57.1%	62.6%	53.8%	55.0%	57.5%	63.3%
	Suffering	28.0%	20.7%	11.5%	6.8%	36.8%	20.5%	11.8%	5.3%	33.0%	18.1%	11.1%	6.5%
Financial wellbeing	Struggling	36.9%	37.5%	36.7%	29.1%	33.2%	38.4%	32.8%	26.3%	33.0%	33.7%	36.6%	24.3%
	Thriving	35.1%	41.7%	51.8%	64.1%	30.0%	41.1%	55.4%	68.4%	34.0%	48.3%	52.2%	69.2%
	Suffering	15.7%	12.4%	9.8%	8.6%	20.9%	12.7%	9.2%	6.6%	14.2%	10.3%	9.4%	9.2%
Community wellbeing	Struggling	39.1%	40.1%	39.3%	36.9%	35.9%	38.5%	37.3%	35.2%	36.9%	35.4%	39.2%	28.0%
	Thriving	45.2%	47.5%	50.9%	54.5%	43.2%	48.8%	53.5%	58.2%	48.9%	54.3%	51.4%	62.8%
	Suffering	12.5%	8.5%	6.7%	5.7%	15.1%	9.4%	7.0%	4.8%	15.5%	9.0%	7.0%	4.8%
Physical wellbeing	Struggling	53.9%	55.2%	52.0%	50.4%	53.5%	53.0%	53.7%	46.8%	51.8%	54.5%	57.2%	47.2%
	Thriving	33.6%	36.3%	41.2%	43.9%	31.4%	37.6%	39.3%	48.4%	32.7%	36.6%	35.8%	48.0%
	Suffering	66.1%	72.2%	80.6%	85.6%	61.7%	74.6%	81.6%	88.0%	65.6%	75.7%	83.7%	88.7%
Life evaluation	Struggling	31.3%	26.8%	19.0%	14.0%	34.6%	24.0%	18.3%	11.8%	32.7%	23.2%	15.8%	11.3%
	Thriving	2.7%	1.1%	0.4%	0.4%	3.7%	1.3%	0.1%	0.2%	1.7%	1.1%	0.5%	0.0%

Figure A1: Relevance Influences Value and Quality



Source: Auter, Z. (May 2018) Relevance Linked to Views of Education Quality and Value. Gallup Blog. Retrieved from Gallup website: https://news.gallup.com/opinion/gallup/233636/relevance-linked-views-education-quality-value.aspx.

# **ENDNOTES**

- 1 The state of American jobs. (October 2016) Retrieved from Pew Research Center website: https://www.pewsocialtrends.org/2016/10/06/5-the-value-of-a-college-education/
- 2 Marken, S. (December 2019) Half in U.S. now consider college education very important. Gallup Blog. Retrieved from Gallup website: https://www.gallup.com/education/272228/half-consider-college-education-important.aspx
- 3 Crabtree, S & Seymour, S. (September 2015) Recent grads less likely to agree college was worth the cost. Retrieved from Gallup website: https://news.gallup.com/poll/185819/recent-grads-less-likely-agree-college-worth-cost.aspx
- 4 The relationship between engagement at work and organizational outcomes. Gallup Q12® Meta-Analysis (10th ed.). Retrieved from Gallup website: https://news.gallup.com/reports/191489/q12-meta-analysis-report-2016.aspx
- 5 Great jobs, great lives. The 2014 Gallup-Purdue index report. (2014) Retrieved from Gallup website: https://www.gallup.com/services/176768/2014-gallup-purdue-index-report.aspx
- 6 Marken, S. (December 2020) College students report quality experience amid COVID-19. Gallup Blog. Retrieved from Gallup website: https://news.gallup.com/opinion/gallup/327713/college-students-report-quality-experience-amid-covid.aspx